

nearly resembles *C. nigra* L. with its entire to slightly lobed leaves and with its feather-like (pectinate) outer bracts of the involucre. In *Centaurea austriaca*, however, the body of the outer bracts is long attenuate or acuminate, not ovate as in *C. nigra*.

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HALESIA CAROLINA L. IN KENTUCKY,
INDIANA, AND OHIO¹

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While studying the genus *Halesia*, new data has been found concerning the occurrence of *H. carolina* L. in three states where the presence of the species has been considered questionable. Most current manuals, *e.g.*, Small (1933), Fernald (1950), Gleason (1952), and Gleason and Cronquist (1963), do not include Kentucky within the range of this species. McFarland (1942) omits the species from his list of Kentucky plants and no specimens from naturally-occurring plants are present in the Kentucky State Herbarium (Dr. Edward Browne, personal communication, 1966). Gibson (1961) includes *H. carolina* in the state flora without specific locality. Braun (1943) reports the species from Harlan County and Garman (1913) notes its presence at "Star Lime Works, Lyon County." Braun (personal communication, 1966) reports that the Harlan County population is probably now extinct due to destructive logging and mining in the area. Herbarium specimens have been examined from McCracken and Marshall Counties on the Tennessee River in western Kentucky and from Lawrence County on the Big Sandy River in eastern Kentucky.

¹Contributions from the Botanical Laboratory, The University of Tennessee, N. Ser. 270.

The Lyon County record is considered authentic due to its proximity to documented stations even though voucher specimens are not available. Additional stations may be expected in counties adjacent to the Tennessee River and possibly in the extreme eastern section of the state.

Halesia carolina L. reaches the northernmost limit of its natural range in southern Ohio where it is known from only two counties. The species is rare there and had previously been reported only from Scioto County (Schaffner, 1932; Jones, 1943; Braun, 1961); additional specimens have been observed from Pike County.

Brendel (1858) first reported *H. carolina* from Indiana "Near Evansville on the Ohio River." Coulter (1899) also reported the species from this area but Deam (1940) specifically excluded the species from his *Flora of Indiana* since neither Coulter's nor Brendel's report could be authenticated. Fernald (1950) credits the species to southern Indiana without specific locality, but other manuals (Small, Gleason, Gleason and Cronquist) exclude this state from its range. Specimens have been examined from two counties, Vanderburgh and Perry. It should be noted, however, that all specimens examined were collected before 1860, and due to expansion of Evansville and disturbance of surrounding areas, it is quite possible that the species is now extinct in that area. Further exploration in southern Indiana, especially along the Ohio River, may possibly yield other stations.

The following specimens were examined (herbarium abbreviations follow Lanjouw and Stafleu, 1964; appreciation is extended to the curators of the respective herbaria for use of their material):

KENTUCKY: LAWRENCE COUNTY: Louisa, 1837, *C. W. Short s.n.* (TEX). MARSHALL COUNTY: 2 mi. s. of Tenn. River between Calvert City and Paducah, 22 Sept., 1945, *W. H. Duncan 6186* (GA, MO). MCCracken COUNTY: along the banks of the Tennessee River, 2 May, *R. J. Fleetwood, s.n.* (DPU). OHIO: PIKE COUNTY: Hay Hollow, Jackson Twp., 4 Oct., 1964, *Floyd Bartley s.n.* (OS); e. of Omega, Scioto River, 16 Aug., 1965, *C. S. Johnson 147* (NCU). SCIOTO COUNTY: Porter Twp., 13 April, 1929, *Conrad Roth s.n.* (PH). INDIANA:

VANDEBURGH COUNTY: near Evansville on Indiana Bank of Ohio River, 1848, *C. W. Short s.n.* (MO); near Evansville, 1850, *C. W. Short s.n.* (GH); banks of Ohio River near Evansville, 1858, *C. W. Short s.n.* (PH).

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